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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,122	12/09/2003	Kazuhiro Ishiguro	1009683-000489	4343

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EXAMINER	
RAHMJOO, MANUCHER	
ART UNIT	PAPER NUMBER
2624	

NOTIFICATION DATE	DELIVERY MODE
06/15/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No.	Applicant(s)	
	10/730,122	ISHIGURO, KAZUHIRO	
	Examiner	Art Unit	
	MIKE RAHMJOO	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 May 2009*.

2a)☒ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *3-9 and 14* is/are allowed.

6)☒ Claim(s) *1,2 and 10-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 10- 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki (US PAP 2002/ 0081031).

As per claim1, Suzuki broadly teaches an isolated dot (i.e., isolation point) discriminating portion judging (i.e., section 76), for each pixel of a plurality of pixels included in an image (i.e., 11 by 11 pixel matrix region), whether the pixel is a center pixel of an isolated dot (i.e., signal held by an 11.times.11 pixel matrix whose center is the target pixel, and the pixels corresponding to the isolation point are counted) see for example [0095];

a size detector detecting an isolated dot size (i.e., section 79 counts the number of internal edge pixels that exists in a 3.times.3 pixel matrix region in [95] and or 5x 5 matrix data 83 in [0098]; said size explicitly being determined in said regions);

a dot region discriminating portion (i.e., detection section 81) judging whether a target pixel is included in a dot region based on a count value (i.e., target pixel positioned at the center of matrix data 83) of said pixels judged as being a center pixel (i.e., pixel a33 as the center pixel) of an isolated dot see for example [0098]; and

a dot region determining portion (i.e., detection section 81)determining a dot region based on a position of said target pixel (i.e., matrix data 83 whose target pixel is positioned at the center as pixel a33) judged as being included in the dot region and said isolated dot size detected for the target pixel or a related pixel (i.e., 5x 5 matrix data 83) see for example [0098].

As per claim 10 Suzuki teaches a processor performing prescribed processing on the image, said processor changing a level of said prescribed processing (i.e., minimum filtering) to be performed on said determined dot region in accordance with said detected isolated dot size (i.e., 5x 5 matrix data) see for example [108].

As per claim 11 Suzuki teaches said prescribed processing is smoothing see for example the smoothing in [108].

As per claim 12 Suzuki teaches said prescribed processing is edge enhancement see for example [103].

As per claim 13 Suzuki teaches said level includes a level where no processing (i.e., signal is 2 and no processing is performed) is performed see for example [103].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Sawada (US Patent 6181437).

As per claim 2 Suzuki teaches plurality of calculators (i.e., filters 52- 57) in [0057]. Suzuki does not explicitly teach a plurality of calculators, each using a filter having sensitivity corresponding to an isolated dot size different from each other to calculate an evaluation value corresponding to the relevant isolated dot size for each process-target pixel, and a comparator comparing the evaluation values calculated by said plurality of calculators with prescribed threshold values.

However, Sawada teaches a plurality of calculators (i.e., row and column calculators for line image determination), each using a filter having sensitivity corresponding to an isolated dot size different from each other to calculate an evaluation value corresponding to the relevant isolated dot size for each process-target pixel (i.e., for an isolated pixel, counting the number of pixels in scanning window 21 in column 8 lines 20- 25), and

a comparator comparing the evaluation values calculated by said plurality of calculators with prescribed threshold values (i.e., determination of the line image by comparing the result with a count value table and use of a predetermined intensity) see for example column 8 lines 20- 25.

It would have been made obvious to one of ordinary skilled in the art at the time the invention was made to incorporate the teachings of Sawada into Suzuki to include a scanning window for inputting image data containing a target pixel and a counting

device for counting the numbers of predetermined pixels and a line image determining device for determining, based on the result of counting, whether the pixel data in the scanning window forms a line image or not and therefore, the determination of the line image can be performed surely and as a result, jaggies at the line image can be surely prevented see for example column 3 lines 5- 32.

Allowable Subject Matter

Claims 3- 9 and 14 are allowed.

Response to Arguments

Applicant's arguments filed 5/11/09 have been fully considered but they are not persuasive.

In response to applicant's remarks dated 5/11/09 wherein applicant argues "dots") that exist in the 1 lxl 1 pixel matrix region. The isolation point counting section 76 does not judge, for each pixel of a plurality of pixels included in an image, whether the pixel is a center pixel of an isolation point" and "Suzuki does not teach or suggest the combination of claim 1 that includes a size detector detecting an isolated dot size. The Office Action indicates that this element is taught by paragraph [0098] of Suzuki. However, that section discloses a continuity detector, not a size detector", examiner would point out to the portion recited of the record which teaches determination of the center of a matrix region. As to the detection of the size of said matrix as argued, the center (as argued) is inherently obtained in the absence of which said determination of

the size for the region would be obsolete. Moreover, said size of said region (i.e., pixel matrix region) is determined as well as per cited portions of the record.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Rahmjoo whose telephone number is 571-272-7789. The examiner can normally be reached on 8 AM- 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Bella can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mike Rahmjoo

June 5, 2009

/Matthew C Bella/

Supervisory Patent Examiner, Art Unit 2624